Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

PUBLIC HEALTH REPORTS.

UNITED STATES.

THE BITING OF MAN BY SQUIRREL FLEAS.

[By Passed Asst. Surg. George W. McCoy.]

The finding of several plague-infected ground squirrels in California, together with the belief that it is possible for man to be infected with plague from squirrels, has prompted the following experiments to determine whether fleas from these rodents would bite man under experimental conditions.

In the experiments the common California ground squirrel (*Citellus beecheyi*) the species in which plague infection has been found, was etherized in a mouse jar and the fleas were collected and identified. The fleas were then placed in large test tubes, 4 to 6 fleas in each tube. To feed them the tube was inverted over the forearm of a healthy man.

For the first experiment 30 fleas (*Ceratophyllus acutus*), the majority of which were females, were applied one hour after they had been removed from their natural host; only 2 fed. Twenty-four hours later but 1 fed. On the third day 4 of the 8 living fleas in 3 of the tubes fed well. On the sixth day only 12 of the 30 fleas were alive; 9 of these fed.

In the second experiment 5 female fleas (*Ceratophyllus acutus*) were applied to the arm 4 days after they had been taken from the squirrel; none fed. Seven days later, 11 days after being collected, 1 flea was alive, and it fed vigorously.

In the third experiment 4 female specimens of *Hoplopsyllus anomalus* were taken from a squirrel. All of these fed well on the fourth day after they were collected.

The reaction at the site of the feeding was much more marked than after the bite of the human flea, *Pulex irritans*. A red papule associated with marked itching appeared at the point of each puncture. Traces of the lesion remained for several weeks and itching persisted for 10 days.

These experiments prove that the common fleas of the ground squirrels in the vicinity of San Francisco will bite man under the experimental conditions noted. Whether man is actually infected from squirrels through their fleas is a matter that remains to be determined. The Indian Plague Commission believed that infection from the rat flea was probably through dejecta from the flea. In our experiments it was noted that even during the most prolonged feeding the fleas never ejected blood or feces from the anus.